

ABSTRACT OF THE DISCLOSURE

A method for forming nanostructures on a workpiece includes the steps of: positioning a counter-electrode and a workpiece electrode arrangement relative to each other, such that, there is a gap between the counter-electrode and the workpiece electrode arrangement; and applying an electrical pulse between the workpiece electrode arrangement and the counter electrode, such that, an electrical discharge is produced in the gap. The electrical discharge forms at least one nanostructure in a first region of a surface of the workpiece electrode arrangement. The electrical pulse has a duration of less than one millisecond. The first region is selectively determined by a shape of the counter-electrode and a relative positioning of the workpiece electrode arrangement and the counter-electrode. The scope of the invention also includes a system for performing this method.